

Title (en)
METHOD FOR TRANSMISSION CONTROL IN HYBRID TEMPORAL-SNR FINE GRANULAR VIDEO CODING

Title (de)
ÜBERTRAGUNGSSTEUERUNG IN EINEM HYBRIDEN ZEITLICH - SNR FEINGRANULARSKALIERBAREN VIDEOKODIERUNGSVERFAHREN

Title (fr)
PROCEDE DE COMMANDE DE TRANSMISSION DANS UN CODAGE VIDEO FINEMENT GRANULAIRE A RAPPORT SIGNAL/BRUIT TEMPOREL ET HYBRIDE

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Application
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Abstract (en)
[origin: US2003035480A1] In a Fine Granular Video encoding system, a method for determining the number of transmission bits of SNR encoded and temporally encoded video data within a frame to balance image quality and object motion is presented. In accordance with the principles of the invention, a number of transmission bits at a known bit-rate for a quality enhanced video frame and a temporal enhanced video frame is determined to balance image quality and object motion smoothness. In one aspect of the invention, the number of bits transmitted in each frame is determined by comparing a ratio of a measure of video encoded information within the quality enhanced video frame and a measure of video encode information within the quality enhanced video frame and the temporally enhanced video frame to a known threshold level. The number of transmission bits in each enhancement layer is then determined using a first method when the ratio is above a known threshold and using a second method otherwise. In a second aspect of the invention, the number of bits is determined by first determining a measure of motion activity and complexity. The number of transmission bits is determined using a first method when the motion activity is below a known measure or the complexity if above a known threshold. Otherwise a second method is used to determine the number of transmission bits in each enhancement layer.

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